We claim:

5   1.   A method for comparing file tree descriptions comprising:

obtaining a first file structure;

obtaining a second file structure;

comparing said first file structure to said second file structure; and

generating one or more changes that transform said first file structure to said

10   second file structure.

2.   The method of claim 1 wherein said comparing further comprises:

recursively walking said first file structure.

15   3.   The method of claim 1 wherein said changes comprise a sequence log of

changes.

4.   The method of claim 1 wherein said first file structure is a file tree index.

20   5.   The method of claim 1 wherein said second file structure is a file tree

index.

6.   The method of claim 1 wherein said comparing further comprises:

comparing one or more folders of said first file structure along with its children

25   with a corresponding folder along with its children in said second file structure.

7.   The method of claim 3 further comprising:

optimizing said sequenced log of changes.

8.   The method of claim 7 wherein said optimizing further comprising:

transforming a plurality of operations in said sequenced log of changes to a single

operation.

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9.   A file tree comparator comprising:

a first file structure configured to be obtained;

a second file structure configured to be obtained;

a comparator configured to compare said first file structure to said second file

10   structure; and

to generate one or more changes that transform said first file structure to said

second file structure.

10.   The file tree comparator of claim 9 wherein said step to compare further

15   comprises:

to recursively walk said first file tree structure.

11.   The file tree comparator of claim 9 wherein said changes comprise a

sequence log of changes.

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12.   The file tree comparator of claim 9 wherein said first file structure is a file tree

index.

13.   The file tree comparator of claim 9 wherein said second file structure is a   file

25   tree index.

14.   The file tree comparator of claim 9 wherein said step to compare further

comprising:

to cause said file tree comparator to compare one or more folders of said first file structure along with its children with a corresponding folder along with its children in said second file structure.

5   15.   The file tree comparator of claim 11 further comprising:
to optimize said sequenced log of changes.

16.   The file tree comparator of claim 15 wherein said step to optimize further comprising:

10   to transform a plurality of operations in said sequenced log of changes to a single operation.

17.   A computer program product comprising:
a computer usable medium having computer readable program code embodied

15   therein for comparing file tree descriptions, said computer program product comprising:
computer readable code configured to cause a computer to obtain a first file structure;
computer readable code configured to cause a computer to obtain a second file

20   structure;
computer readable code configured to cause a computer to compare said first file structure to said second file structure; and
computer readable code configured to cause a computer to generate one or more changes that transform said first file structure to said second file structure.

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18.   The computer program product of claim 17 wherein said step to compare further comprising:

computer readable code configured to cause a computer to recursively walk said first file structure.

19. The computer program product of claim 17 wherein said changes comprise a sequence log of changes.

20. The computer program product of claim 17 wherein said first file structure is a file tree index.

21. The computer program product of claim 17 wherein said second file structure is a file tree index.

22. The computer program product of claim 17 wherein said step to compare further comprising:

computer readable code configured to compare one or more folders of said first file structure along with its children with a corresponding folder along with its children in said second file structure.

23. The computer program product of claim 18 further comprising:

computer readable code configured to optimize said sequenced log of changes.

24. The computer program product of claim 23 wherein said step to optimize further comprising:

computer readable code configured to transform a plurality of operations in said sequenced log of changes to a single operation.